WHAT IS CLAIMED IS:

1. A data processing method for generating print data to be supplied to a printing apparatus capable of multi-value recording, said method comprising:

a multi-value conversion step of converting obtained image data to multi-value print data;

a binarizing step of converting the obtained image data to binary print data; and

a selection step of selecting either one of said multi-value conversion step and said binarizing step in accordance with a condition.

2. A data processing method according to Claim 1, wherein said multi-value conversion step effects its converting operation through a half-tone processing using an error diffusion method.

3. A data processing method according to Claim 1, wherein said binarizing step effects its converting operation through a half-tone processing using a dither method.

4. A data processing method according to Claim 1, further comprising a combining step of combining the print data provided by said multi-value conversion step and the print data provided by said binarizing step to generate the print data to be supplied to said

printing apparatus.

5. A data processing method according to Claim 1, further comprising a bit converting step of making the number of bits of the binary print data provided by said binarizing step equal to the number of bits of the multi-value print data provided by said multi-value conversion step.

6. A data processing method according to Claim 1, wherein said selection step selects either one of said multi-value conversion step and said binarizing step in accordance with a nature of the obtained image data.

7. A data processing method according to Claim 6, wherein said selection step selects said multi-value conversion step when the obtained image data are bit map data.

8. A data processing method according to Claim 7, wherein said selection step selects said binarizing step when the obtained image data are text data or vector data.

9. A data processing method according to Claim 1, wherein said selection step selects either one of

said multi-value conversion step and said binarizing step in accordance with a nature of an operating system of a host computer.

10. A data processing method according to Claim 1, wherein said selection step selects either one of said multi-value conversion step and said binarizing step in accordance with a nature of an image processing device for generating the image data.

11. A data processing method according to Claim 1, wherein said selection step selects either one of said multi-value conversion step and said binarizing step in accordance with a printing mode of said printing apparatus.

12. A data processing method according to Claim 1, wherein said selection step selects either one of said multi-value conversion step and said binarizing step in accordance with at least two of the obtained image data, an operating system of a host computer, an image processing device for generating the image data and a printing mode of said printing apparatus.

13. A data processing method according to claim 1, wherein said printing apparatus is capable of forming a color image by application of different

color inks onto a print medium while scanningly moving a recording head thereof bi-directionally;

changing means for changing an order of application of the different color inks to be applied for formation of secondary color in a pixel area of secondary color;

forming means for forming the secondary color while making the order of applications of the inks to at least one of a plurality of the secondary color pixel areas arranged along a raster scan direction different from the order of another, by said changing means; and

wherein the secondary color is formed on the basis of the multi-value print data provided by said multi-value conversion step.

14. A data processing method according to Claim 13, wherein in order to make the application of a certain color ink of the different color inks to be applied to form a secondary color on a pixel area of the secondary color symmetrical relative to another color ink, said forming means forms the secondary color by a plurality of applications of the certain color ink to the pixel area, and wherein the secondary color is formed on the basis of the binary print data provided by said binarizing step.

15. A data processing method according to Claim 13, further comprising a bit converting step of making the number of bits of the binary print data provided by said binarizing step equal to the number of bits of the multi-value print data provided by said multi-value conversion step, and converting the binary print data to the number of ink applications.

16. A recording medium for storing a data processing program for generating print data to be supplied to a printing apparatus capable of multi-value recording, the improvement residing in that data processing program comprises:

a multi-value conversion step of converting obtained image data to multi-value print data;

a binarizing step of converting the obtained image data to binary print data; and

a selection step of selecting either one of said multi-value conversion step and said binarizing step in accordance with a condition.

17. A printing apparatus capable of multi-value recording on the basis of multi-value print data supplied thereto, said apparatus comprising:

discriminating means for discriminating whether the data supplied to said printing apparatus is binary or not;

bit converting means for converting, when the supplied print data are binary, the number of bits of the binary print data to the number of bits of the multi-value print data.

18. A printing apparatus capable of forming a color image by application of different color inks onto a print medium while scanningly moving a recording head thereof bi-directionally, said apparatus comprising:

changing means for changing an order of application of the different color inks to be applied for formation of secondary color in a pixel area of secondary color;

forming means for forming the secondary color while making the order of applications of the inks to at least one of a plurality of the secondary color pixel areas arranged along a raster scan direction different from the order of another, by said changing means; and

bit converting means for converting, when the supplied print data are binary, the number of bits of the binary print data to the number of bits of the multi-value print data.

19. A printing apparatus according to Claim 18, wherein in order to make the application of a certain

color ink of the different color inks to be applied to form a secondary color on a pixel area of the secondary color symmetrical relative to another color ink, said forming means forms the secondary color by a plurality of applications of the certain color ink to the pixel area, and wherein the secondary color is formed on the basis of the binary print data provided by said binarizing step.

20. A printing apparatus for forming a color image by application of different color inks onto a print medium while scanningly moving a recording head thereof bi-directionally, said apparatus comprising:

first forming means for changing an order of application of the different color inks to be applied for formation of secondary color in a pixel area of secondary color and forming the secondary color while making the order of applications of the inks to at least one of a plurality of the secondary color pixel areas arranged along a raster scan direction different from the order of another, by said changing means; and

second forming means for changing an order of application of the different color inks to be applied for formation of secondary color in a pixel area of secondary color and forming the secondary color while making the order of applications of the inks to at least one of a plurality of the secondary color pixel

areas arranged along a raster scan direction different from the order of another, by said changing means; and

control means for forming the secondary color by said first forming means when the supplied print data are multi-value data, and forming the secondary color by said second forming means when the print data are binary data.

21. A printing apparatus according to any one of Claims 17-21, wherein said recording head ejects the ink by heat.

22. A printing method capable of multi-value recording on the basis of multi-value print data supplied thereto, the improvement residing in:

a bit converting step of making, when the supplied print data are binary data, the number of bits of the binary print data provided by said binarizing step equal to the number of bits of the multi-value print data provided by said multi-value conversion step.

23. A printing method capable of forming a color image by application of different color inks onto a print medium while scanningly moving a recording head thereof bi-directionally, said method comprising:

a changing step of changing an order of

application of the different color inks to be applied for formation of secondary color in a pixel area of secondary color;

a forming step of forming the secondary color while making the order of applications of the inks to at least one of a plurality of the secondary color pixel areas arranged along a raster scan direction different from the order of another, by said changing means; and

a bit converting step of converting, when the supplied print data are binary, the number of bits of the binary print data to the number of bits of the multi-value print data.